

Comparisons of Job Characteristics

Focus Occupation: [Electrical and Electronics Repairers, Commercial and Industrial Equipment \(49-2094\)](#)

Associated Occupation: [Electrical and Electronic Engineering Technicians \(17-3023\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Electrical and Electronics Repairers, Commercial and Industrial Equipment (49-2094)

Associated Occupation: Electrical and Electronic Engineering Technicians (17-3023)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Computers and Electronics	8.4	15.8	17.5	> Current knowledge level is likely sufficient
Engineering and Technology	5.7	12.4	11.7	0 Current knowledge level may be sufficient
Mechanical	6.8	11.6	16.4	>> Current knowledge level is likely more than sufficient
Design	5.2	10.2	9.6	0 Current knowledge level may be sufficient
Telecommunications	3.9	8.4	6.9	< Expanded education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 56

Focus Occupation: Electrical and Electronics Repairers, Commercial and Industrial Equipment (49-2094)

Associated Occupation: Electrical and Electronic Engineering Technicians (17-3023)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Quality Control Analysis	5.9	8.8	13.3	>> Skill level is likely more than sufficient
Troubleshooting	4.5	8.8	12.0	>> Skill level is likely more than sufficient
Repairing	3.4	8.0	13.3	>> Skill level is likely more than sufficient
Equipment Maintenance	3.5	7.9	11.1	>> Skill level is likely more than sufficient
Equipment Selection	3.3	7.0	10.5	>> Skill level is likely more than sufficient
Technology Design	2.6	4.9	6.3	> Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 82			
Focus Occupation: Electrical and Electronics Repairers, Commercial and Industrial Equipment (49-2094) Associated Occupation: Electrical and Electronic Engineering Technicians (17-3023)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Comprehension	12.5	12.2	11.1	0	Current ability level may be sufficient
Problem Sensitivity	11.1	12.0	11.5	0	Current ability level may be sufficient
Written Comprehension	11.0	12.0	10.3	<	Some improvement in abilities may be required
Near Vision	11.1	11.6	12.0	0	Current ability level may be sufficient
Oral Expression	12.4	11.6	10.3	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	11.1	11.1	0	Current ability level may be sufficient
Information Ordering	9.9	11.0	11.1	0	Current ability level may be sufficient
Written Expression	9.8	10.7	9.0	<	Some improvement in abilities may be required
Finger Dexterity	7.6	9.9	12.9	>>	Current ability level is likely more than sufficient
Visualization	7.5	9.8	11.0	>	Current ability level is likely sufficient
Visual Color Discrimination	6.4	9.6	10.6	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 88
Focus Occupation: Electrical and Electronics Repairers, Commercial and Industrial Equipment (49-2094) Associated Occupation: Electrical and Electronic Engineering Technicians (17-3023)		
Work Activities	Exclusivity of Activity	
Analyze technical data, designs, or preliminary specifications	47	
Calibrate or adjust electronic equipment or instruments to specification	67	
Communicate technical information	4	
Confer with engineering, technical or manufacturing personnel	25	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Install electronic equipment, components, or systems	62	
Install/connect electrical equipment to power circuit	57	
Modify electrical or electronic equipment or products	74	
Read blueprints	10	
Read schematics	34	
Read technical drawings	7	

Repair computer controlled manufacturing systems	95
Repair electronic components, equipment, or systems	74
Repair or replace electrical wiring, circuits, fixtures, or equipment	49
Solder electrical or electronic connections or components	55
Understand detailed electronic design specifications	70
Understand service or repair manuals	40
Understand technical information for electronic repair work	76
Understand technical operating, service or repair manuals	6
Use computer aided drafting or design software for design, drafting, modeling, or other engineering tasks	58
Use electrical or electronic test devices or equipment	40
Use electronic calibration devices	68
Use hand or power tools	2
Use oscilloscopes in electronics repair	77

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 74

Focus Occupation: Electrical and Electronics Repairers, Commercial and Industrial Equipment (49-2094)
Associated Occupation: Electrical and Electronic Engineering Technicians (17-3023)

Tools and Technologies	Exclusivity
Anti static equipment and supplies	56
Business function specific software	1
Circuit assemblies and radio frequency RF components	40
Computer data input devices	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Data management and query software	1
Electrical measuring and testing equipment	7
Electronic and communication measuring and testing instruments	14
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Integrated circuits	18
Light and wave generating and measuring equipment	4
Machine tools	7
Network applications software	1
Power generators	16
Power tools	2
Soldering and brazing and welding machinery and supplies	6
Transportation related equipment and instruments	29
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.